



Request for Proposals
Iowa Department of Agriculture and Land Stewardship

Water Quality Initiative
Nutrient Reduction Strategy Practice Implementation &
Demonstration Projects

Proposals are Due:
NO LATER THAN 4:30 PM
FRIDAY, April 10th, 2015



PROGRAM OBJECTIVES AND DESIRED OUTCOMES

The Iowa Department of Agriculture and Land Stewardship (IDALS) is issuing this request for proposals (RFP) to provide funding for demonstration projects that lead to reducing the loss of nutrients to waters of Iowa.

IDALS is seeking proposals for projects that complement and enhance existing efforts of the Iowa Nutrient Reduction Strategy (NRS). Projects should focus on adoption of practices that provide nutrient load reductions to water resources in combination with outreach and education components demonstrating how projects will work to support the nonpoint source action items outlined in Section 1 of the Strategy. The Iowa Nutrient Reduction Strategy can be viewed at <http://www.nutrientstrategy.iastate.edu>.

Applicants should demonstrate a proven track record of delivering outreach and demonstration programming and practices and have established strong partnerships with stakeholders that have or will be contributing significant resources to the project.

Desired outcomes for these projects will include concentrated efforts to demonstrate conservation practices paired with strong outreach/education components to disseminate information on these practices to promote increased awareness and adoption of available practices and technologies for achieving reductions in nutrient loads to surface waters. Quarterly, annual, and final reports will be required to document project progress and products as well as to provide aggregate accounting of practice adoption levels. Successful projects will serve as local and regional hubs for demonstrating conservation practices and providing practice information to other farmers and/or landowners.

PROJECT SUMMARY

- Innovative and collaborative efforts to expand implementation of practices on a watershed and/or regional basis that maximize benefits of particular practice.
- Targeted to locations and/or specific cropping systems with documented need for integration of these practices.
- Practices demonstrated must be included in the Iowa NRS, but should include practices that are under-served, outside of usual conservation funding programs, or focused on particular regions or cropping system(s) that have the ability to rapidly expand adoption throughout the region or in similar cropping systems
- Projects that include practices that are cost-effective and have a larger impact on N & P reductions will receive priority consideration for funding (i.e. edge-of-field practices, cover crops, etc.)
- Leverage additional resources from partner(s) agencies to expand scope and impact of the project.

PRIORITY WATERSHED AREAS

Projects are not required to be located within priority HUC8 watersheds that have been identified by the Water Resources Coordinating Council (WRCC) but projects with in these watersheds will receive priority consideration. A map is attached for reference. These HUC8 watersheds include all or parts of 68 Iowa counties and include 429 HUC12 subwatersheds. The priority HUC8 watersheds are (see map on page 8):

- | | | |
|-----------------|--------------------|--------------------|
| ➤ Floyd | ➤ East Nishnabotna | ➤ West Nishnabotna |
| ➤ North Raccoon | ➤ Boone | ➤ Middle Cedar |
| ➤ Skunk | ➤ South Skunk | ➤ Turkey |

ELIGIBLE APPLICANTS

Soil and Water Conservation Districts (SWCDs), counties, county conservation boards, cities or other units of government, not-for-profit non-governmental organizations (NGO's) authorized by the secretary of state, public water supply utilities or watershed management authorities are eligible to submit proposals. Due to the nature of this program and the emphasis on implementation of conservation practices and documentation supportive of the nutrient reduction strategy, applicants should collaborate with IDALS staff. Applicants are also strongly encouraged to partner with stakeholders that will benefit from installation of non-point, agricultural conservation practices and would be able to assist with education and information transfer.

ELIGIBLE EXPENSES

Eligible expenses include:

- Project costs for cost-sharing of practices (State funds not to exceed 50% of cost)
- Outreach/education components such as field days, publications, signs, and informational meetings
- Technical assistance needs for project implementation

PROJECT DURATION

Projects funded under this RFA will be allowed up to three years for initial project duration with the possibility of future extensions depending on future funding availability and project performance. Project funds will be available upon execution of a funding agreement with IDALS-DSC and projects cannot incur reimbursable expenses before that time.

DISBURSEMENT OF FUNDS

The Primary Grantee will be responsible for submitting payment requests to IDALS. Expense payments will be made on cost reimbursable basis. The Grantee will submit invoices and/or other required documentation to IDALS for the disbursement of funds. An explanation of the process and the required documentation will be provided to the Grantee by IDALS as part of the project agreement process.

FISCAL MANAGEMENT

The Primary Grantee must include documentation of their ability to provide appropriate fiscal management of the funds requested in the project proposal. If the group is unable to meet this requirement themselves, they may include documentation of their partnership with an entity that has an appropriate fiscal management structure in place in order to be considered an eligible applicant.

PROPOSAL DETAILS

Proposals must be submitted following the format and page limits provided. Maps and letters of support will not count against stated page limits. Letters of support are required to confirm the roles/contributions of identified partners.

Potential applicants are encouraged to schedule a meeting with IDALS Water Quality Initiative Coordinator and/or Regional Basin Coordinators to help formulate strong projects and proposals. Proposals are due April 10th, 2015 by 4:30 pm. Proposals will be reviewed by IDALS, and notice of award is anticipated to be made by April 24th, 2015.

The projected timeline for the complete proposal process is detailed below:

- RFP open: March 2nd, 2015
- RFP closed: April 10th, 2015
- Selections made: April 24th, 2015
- Projected start: June 1st, 2015

PROPOSAL REVIEW & SELECTION

Eligible proposals will be reviewed by IDALS. IDALS intends to provide notice of award by April 24th, 2015. Upon selection, successful applicants will enter into contract negotiation with IDALS. Anticipated start date of the awarded project is June 1st, 2015

PROPOSAL EVALUATION FACTORS *(points in parentheses- 150 points possible)*

- Scope and objectives correlation to the Iowa Nutrient Reduction Strategy (30)
- Collaborative outreach/education efforts to increase practice adoption and disseminate information broadly including robust evaluation plan to report progress and accomplishments (30)
- Innovative and targeted delivery of most effective practices to areas providing most benefit (25)
- Demonstrated ability to implement the project /practices in an efficient manner; readiness to proceed quickly upon project approval (25)
- Demonstrated strong partnerships and landowner willingness/participation levels to commit financial and in-kind support to the project (25)
- Project is located in a priority HUC 8 watershed (15)

PROPOSAL ASSISTANCE

Water Quality Initiative Coordinator – Matt Lechtenberg, 515-281-3857 or matthew.lechtenberg@iowaagriculture.gov

For help with proposals you may obtain assistance from the Regional or Basin Coordinator for your area:

- Western Iowa
 - Bob Waters - 515-306-7012 or Bob.Waters@iowaagriculture.gov
- Northeast Iowa
 - Jeff Tisl -563-422-6201 or Jeff.Tisl@iowaagriculture.gov
- Southeast Iowa
 - James Martin -641-472-8411 ext. 104 or James.Martin@iowaagriculture.gov
- North Raccoon & Des Moines River Basins
 - Kyle Ament -515-242-6196 or kyle.ament@dnr.iowa.gov
- Iowa & Cedar River Basins
 - Mary Beth Stevenson -319-325-8593 or Marybeth.stevenson@dnr.iowa.gov

SPECIAL NOTES

The Iowa Department of Agriculture and Land Stewardship (IDALS) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.)

Distribution of proposals is limited to people involved in the review process, but note that all proposals and subsequent reports and related information are in the public domain. All reports related to funded projects will be made available to all interested parties in printed, electronic, or other means of communication, without discrimination.

Names, addresses and telephone numbers of Project Coordinators (from funded projects) may be provided to interested news entities, potential project participants, or organizations for subsequent inquiries. Proposals are used in the peer review process and submission of a proposal establishes consent by the author for appropriate distribution to fulfill review requirements.

Proposals approved for funding will be required to enter into a project agreement with IDALS. Sponsors of approved projects will be required to submit quarterly, annual, and final project reports utilizing forms and guidance provided by IDALS.

PROCEDURE FOR SUBMITTING PROPOSALS

Submit one electronic copy of your project proposal to IDALS. Arrival date and time of the electronic copy will be used to determine whether a proposal has been submitted on time. **Proposals must be received by 4:30 PM on April 10, 2015.**

Proposals will be accepted by either of the following methods:

1. Submit the electronic copy of the proposal on some type of magnetic storage medium (CD, Flash drive, etc.) and deliver it to the address below:

*Iowa Department of Agriculture and Land Stewardship
Division of Soil Conservation
c/o Mary Baker
502 East 9th Street
Des Moines IA 50319*

2. Submit the electronic file containing your proposal in an attachment by e-mail addressed to Mary.Baker@iowaagriculture.gov. The file size limit for submission of proposals by e-mail is 10MB in size. Hard copies of the proposal will not be accepted without an electronic copy. If you need assistance submitting your proposal, please contact Mary Baker at 515-281-4246 or Mary.Baker@iowaagriculture.gov.

WATER QUALITY INITIATIVE NUTRIENT REDUCTION STRATEGY PRACTICE IMPLEMENTATION & DEMONSTRATION PROJECTS PROPOSAL FOR FUNDING ASSISTANCE

Iowa Department of Agriculture & Land Stewardship

Proposal Cover Sheet: (1 page maximum)

Provide the Following Information on a Proposal Cover Sheet. Additionally, include the signature of the lead applicant authorizing submission of the proposal.

1. Project Title:
Applicant Entity:
Contact Person:
Address:
Phone:
E-mail:
2. Authorized signature of lead applicant_____ Date_____
3. List the watershed, region, or focus area of the project:
4. Project area in relationship to priority HUC8 watershed(s) (page 8):
5. Project duration, including anticipated start and completion dates:
6. Include a listing of all project partners at the time of proposal (letters of support for each partner are not required at this time):
7. Provide a budget summary, utilizing the format shown here:

	IDALS Request	Partner Contributions	Landowner Contributions	Total Budget
Year 1				
Year 2				
Year 3				
Overall				

Proposal Narrative: (3 page maximum)

Provide brief, yet thorough, responses to the following set of questions, with the number and title for each of the sections at the top of the corresponding response.

1. Project Overview

Provide a brief overview of the proposed approach to the demonstration project. Address the following questions in your response:

- What are the critical opportunities, specific practice(s), and/or focus area(s) that will be addressed by your project?
- How is the opportunity important in demonstration and advancement of the Iowa Nutrient Reduction Strategy?
- What is the specific action that your project will take to address this focus or opportunity?
- How will this project lead to increased implementation and adoption of the practice(s) in which you are working, regionally, and/or statewide?

2. Project Objectives

List the primary objectives of the proposed demonstration project. Describe any innovative approaches and what cross-cutting actions among partners taken across objectives. Provide detail on how the project will address each objective.

How will this project be organized and managed to achieve the project's intended change? How will this project achieve and implement the intended change? What are the specific roles of partners in achieving these objectives?

How will this project communicate with producers and other stakeholders key to the project's success, about its work in order to help achieve the intended change? Specify the audiences and stakeholder groups you intend to engage through the project.

How will project results be documented and disseminated to local, regional, and state-level stakeholders in order to connect project outcomes to the overall objectives of the Iowa Nutrient Reduction Strategy? Who are the specific audiences that will receive this information?

3. Project Evaluation

Describe your plans for evaluating the project. What evaluation indicators that will be measured or monitored at each stage of project implementation?

How will the project leaders, participants, and stakeholders know if the project is successful? What information will be collected to measure success, and how will it be collected? Indicators could include, but limited to these categories: inputs, attitudes, land/practice changes, water quality, etc.

Proposal Budget: (2 page maximum, including narrative)

Use the table format shown on the following page to provide an estimated budget for the project. You are encouraged to copy and paste this table here into your proposal. Be sure to review column and row totals for accuracy. In addition to the tables, include a narrative providing the following information:

- Explain the amount and type of all local and partner contributions that will be made to the project. This may be in the form of in-kind contributions, cash contributions, or the commitment of other program funds to be used in conjunction with the financial assistance provided by the project. There is not a matching funds requirement for this program, but it is a consideration of the reviewers. Make sure that the role for staff whose costs are included in the budget is clear in the proposal.
- Practices intended to be demonstrated should be listed in the budget. Add more rows as necessary if needed.
 - Practice(s) must be tied to practices highlighted in the Iowa Nutrient Reduction Strategy (included in pages 13 & 14 of this RFA)
 - Describe method for delivering cost-share assistance to eligible applicants. Are there any unique ways of delivering these practices?
 - Landowner contribution for practices should be accounted for in the budget.
 - For any practice funds requested from IDALS, the total state-share of the practice must not exceed 50% of the total cost of installation. Incentive based practices must be based on 50% of total costs and applicant must be able to provide documentation upon request.
- Provide detailed information on any anticipated subcontracts that will be funded through this project, including identified work products and costs associated with the subcontract.

Table 1. Budget Template

Component	Year 1	Year 2	Year 3	Total	WQI	Local Match	Match Source(s)**
Technical Assistance	\$	\$	\$	\$	\$	\$	
Information/Education	\$	\$	\$	\$	\$	\$	
Supplies	\$	\$	\$	\$	\$	\$	
Contractual (list below)							
Contract	\$	\$	\$	\$	\$	\$	
Contract	\$	\$	\$	\$	\$	\$	
(insert lines as needed)							
Equipment*	\$	\$	\$	\$	\$	\$	
Other*	\$	\$	\$	\$	\$	\$	
Practices (list & number)							
1.	\$	\$	\$	\$	\$	\$	
2.	\$	\$	\$	\$	\$	\$	
3.	\$	\$	\$	\$	\$	\$	
4.	\$	\$	\$	\$	\$	\$	
(add lines as needed)	\$	\$	\$	\$	\$	\$	
TOTALS	\$	\$	\$	\$	\$	\$	

*Provide detail on planned expenditures under Equipment and Other in the budget narrative.

**Include landowner contributions in local match. Use acronyms for other partners and identify acronyms in budget narrative.

Maps and Supporting Data:

Please attach any maps and other supportive data relevant to the proposal as Exhibits, labeling each Exhibit at the top of the first page.

At a minimum, the proposal must include a map of the project area for the proposal which clearly delineates region or watershed(s) to be included in the demonstration project. This map should be included as Exhibit A,

Letters of support from identified partners are required for the proposal. These letters should be included in Exhibit B. Identified partners that are providing funding (cash or in-kind) contributions must indicate these proposed contributions in their letter of support. For proposals lead by Soil and Water Conservation Districts, a letter of support from the respective Area Resource Conservationist must be included with the letters of support.

The map illustrates the Upper Des Moines & Raccoon River Basins in Iowa, categorized into three main regions: Western Iowa, Northeast Iowa, and Southeast Iowa. Each region contains specific river basins with their respective areas in square miles.

- Western Iowa:**
 - North Raccoon: 2,470 square miles
 - West Nishnabotna: 1,652 square miles
 - East Nishnabotna: 1,439 square miles
- Northeast Iowa:**
 - Boone: 908 square miles
 - South Skunk: 1,842 square miles
 - Middle Cedar: 2,415 square miles
- Southeast Iowa:**
 - Skunk: 1,633 square miles
 - Turkey: 1,693 square miles

The map also displays county boundaries and names, and includes a compass rose in the bottom right corner.



Iowa Strategy to Reduce Nutrient Loss: Nitrogen Practices

This table lists practices with the largest potential impact on nitrate-N concentration reduction (except where noted). Corn yield impacts associated with each practice also are shown as some practices may be detrimental to corn production. If using a combination of practices, the reductions are not additive. Reductions are field level results that may be expected where practice is applicable and implemented.

	Practice	Comments	% Nitrate-N Reduction ⁺	% Corn Yield Change ⁺⁺
			Average (SD*)	Average (SD*)
Nitrogen Management	Timing	Moving from fall to spring pre-plant application	6 (25)	4 (16)
		Spring pre-plant/sidedress 40-60 split Compared to fall-applied	5 (28)	10 (7)
		Sidedress – Compared to pre-plant application	7 (37)	0 (3)
		Sidedress – Soil test based compared to pre-plant	4 (20)	13 (22)**
	Source	Liquid swine manure compared to spring-applied fertilizer	4 (11)	0 (13)
		Poultry manure compared to spring-applied fertilizer	-3 (20)	-2 (14)
	Nitrogen Application Rate	Nitrogen rate at the MRTN (0.10 N:corn price ratio) compared to current estimated application rate. (ISU Corn Nitrogen Rate Calculator – http://extension.agron.iastate.edu/soilfertility/nrate.aspx can be used to estimate MRTN but this would change Nitrate-N concentration reduction)	10	-1
	Nitrification Inhibitor	Nitrapyrin in fall – Compared to fall-applied without Nitrapyrin	9 (19)	6 (22)
	Cover Crops	Rye	31 (29)	-6 (7)
		Oat	28 (2)	-5 (1)
	Living Mulches	e.g. Kura clover – Nitrate-N reduction from one site	41 (16)	-9 (32)
Land Use	Perennial	Energy Crops – Compared to spring-applied fertilizer	72 (23)	
		Land Retirement (CRP) – Compared to spring-applied fertilizer	85 (9)	
	Extended Rotations	At least 2 years of alfalfa in a 4 or 5 year rotation	42 (12)	7 (7)
	Grazed Pastures	No pertinent information from Iowa – assume similar to CRP	85	
Edge-of-Field	Drainage Water Mgmt.	No impact on concentration	33 (32)	
	Shallow Drainage	No impact on concentration	32 (15)	
	Wetlands	Targeted water quality	52	
	Bioreactors		43 (21)	
	Buffers	Only for water that interacts with the active zone below the buffer. This would only be a fraction of all water that makes it to a stream.	91 (20)	
	Saturated Buffers	Divert fraction of tile drainage into riparian buffer to remove Nitrate-N by denitrification.	50 (13)	

⁺ A positive number is nitrate concentration or load reduction and a negative number is an increase.

⁺⁺ A positive corn yield change is increased yield and a negative number is decreased yield. Practices are not expected to affect soybean yield.

* SD = standard deviation. Large SD relative to the average indicates highly variable results.

** This increase in crop yield should be viewed with caution as the sidedress treatment from one of the main studies had 95 lb-N/acre for the pre-plant treatment but 110 lb-N/acre to 200 lb-N/acre for the sidedress with soil test treatment so the corn yield impact may be due to nitrogen application rate differences.



Iowa Strategy to Reduce Nutrient Loss: Phosphorus Practices

Practices below have the largest potential impact on phosphorus load reduction. Corn yield impacts associated with each practice also are shown, since some practices may increase or decrease corn production. If using a combination of practices, the reductions are not additive. Reductions are field level results that may be expected where practice is applicable and implemented.

	Practice	Comments	% P Load Reduction ^a	% Corn Yield Change ^b
			Average (SD) ^c	Average (SD) ^c
Phosphorus Management Practices	Phosphorus Application	Applying P based on crop removal – Assuming optimal STP level and P incorporation	0.6 ^d	0
		Soil-Test P – No P applied until STP drops to optimum	17 ^e	0
	Source of Phosphorus	Liquid swine, dairy, and poultry manure compared to commercial fertilizer – Runoff shortly after application	46 (45)	-1 (13)
		Beef manure compared to commercial fertilizer – Runoff shortly after application	46 (96)	
	Placement of Phosphorus	Broadcast incorporated within 1 week compared to no incorporation, same tillage	36 (27)	0
		With seed or knifed bands compared to surface application, no incorporation	24 (46)	0
	Cover Crops	Winter rye	29 (37)	-6 (7)
	Tillage	Conservation till – chisel plowing compared to moldboard plowing	33 (49)	0 (6)
		No till compared to chisel plowing	90 (17)	-6 (8)
Land Use Change	Perennial Vegetation	Energy Crops	34 (34)	
		Land Retirement (CRP)	75	
		Grazed pastures	59 (42)	
Erosion Control and Edge-of-Field Practices	Terraces		77 (19)	
	Buffers		58 (32)	
	Control	Sedimentation basins or ponds	85	

^a - A positive number is P load reduction and a negative number is increased P load.

^b - A positive corn yield change is increased yield and a negative number is decreased yield. Practices are not expected to affect soybean yield.

^c - SD = standard deviation. Large SD relative to the average indicates highly variable results.

^d - Maximum and average estimated by comparing application of 200 and 125 kg P₂O₅/ha, respectively, to 58 kg P₂O₅/ha (corn-soybean rotation requirements) (Mallarino et al., 2002).

^e - Maximum and average estimates based on reducing the average STP (Bray-1) of the two highest counties in Iowa and the statewide average STP (Mallarino et al., 2011a), respectively, to an optimum level of 20 ppm (Mallarino et al., 2002). Minimum value assumes soil is at the optimum level.

^f - P retention in wetlands is highly variable and dependent upon such factors as hydrologic loading and P mass input.